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See application file for complete search history.

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## (57) ABSTRACT

A reamer includes a shank, a washer, a ring and a blade. The shank is a polygonal rod and includes an annular groove made in a periphery and a bore made in an end. The washer includes a slot. The ring includes a circular opening. The blade includes an insert inserted in the bore through the slot and the circular opening. The circular opening is made of a diameter larger than a width of the blade to allow the blade to rotate relative to the ring.

## 4 Claims, 7 Drawing Sheets



